



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/539,025	03/30/2000	Haruhiko Nakai	JP980137	7678

25259 7590 02/25/2004

IBM CORPORATION
3039 CORNWALLIS RD.
DEPT. T81 / B503, PO BOX 12195
REASEARCH TRIANGLE PARK, NC 27709

EXAMINER

SCHLAIFER, JONATHAN D

ART UNIT	PAPER NUMBER
----------	--------------

2178

DATE MAILED: 02/25/2004

10

Please find below and/or attached an Office communication concerning this application or proceeding.

dm

Office Action Summary

Application No.

09/539,025

Applicant(s)

NAKAI ET AL.

Examiner

Jonathan D. Schlaifer

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to communications: Amendment filed on 12/4/2003.
2. The objections to the specification are withdrawn as necessitated by amendment.
3. The rejection under 35 U.S.C. 112, second paragraph of claim 10, is withdrawn as necessitated by amendment.
4. The rejections of claims 1 and 8-10 under 35 U.S.C. 103(a) over Hube has been withdrawn as necessitated by amendment.
5. The rejection of claim 2 under 35 U.S.C. 103(a) over Hube, further in view of Patel has been withdrawn as necessitated by amendment.
6. The rejection of claim 3 under 35 U.S.C. 103(a) over Hube, further in view of Patel, further in view of IBMTDB has been withdrawn as necessitated by amendment.
7. The rejection of claim 4 under 35 U.S.C. 103(a) over Hube, further in view of Patel, further in view of Ng has been withdrawn as necessitated by amendment.
8. The rejection of claim 5 under 35 U.S.C. 103(a) over Hube, further in view of Patel, further in view of Ng, further in view of Melen has been withdrawn as necessitated by amendment.
9. The rejection of claim 6 under 35 U.S.C. 103(a) over Hube, further in view of Ng has been withdrawn as necessitated by amendment.
10. The rejection of claim 7 under 35 U.S.C. 103(a) over Hube, further in view of Agazzi has been withdrawn as necessitated by amendment.
11. Claims 1-10 are pending in the case. Claim 1 is an independent claim. Claims 1-6 and 8-10 have been amended.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft Corporation ("Microsoft Word: User's Guide", 1993-1994, Version 6.0, pages 48-50)**
2. **Regarding independent claim 1**, Microsoft Word's Symbol command (described on pages 48-50) can be used to standardize character information in electronic documents because it allows comparison of character information including character code and font information for each character (the characters can be selected individually) used in an electronic document to character information within a target replacement font set (the Symbol command allows targeted replacement for the given font), and the Symbol command generates a comparison table for use during actual character information replacement (see top of page 49), and the table is presented to the user and used by the user to amend errors (replacement characters are selected), and then actually used to replace said character information including character code and font comparison table.
3. **Regarding dependent claim 8**, Microsoft Corporation describes Microsoft Word's facility for choosing replacements in the Symbol command, described in page 48-50, which inherently is a method of standardizing character information in electronic documents, wherein said step of amending error in said comparison table further

comprises the steps of: displaying a candidate list for the comparison table for every entry; and said user selecting one character code from said candidate list. (These are the steps performed by the command., which displays a table from which the user chooses)

4. **Regarding dependent claim 10**, Microsoft Corporation fails to disclose a method of standardizing character information in electronic documents of claim 1, wherein said font set to be provided as a replacement font is a font with Unicode encoding. However, it was notoriously well known at the time of the invention that fonts with Unicode encoding are typically used to encode documents with a wide variety of characters. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the font set to be provided as a replacement font be a font set of the Unicode encoding in order to encode documents with a wide variety of characters.
5. **Claim 2 remains are under 35 U.S.C. 103(a) as being unpatentable over Microsoft Corporation, further in view of Hube, further in view of Patel et al. (USPN 6,426,751 B1—filing date 4/1/1999), hereinafter Patel**
6. **Regarding dependent claim 2**, Microsoft Word fails to explicitly disclose that the step of comparing further comprises inputting an electronic source document; inputting a font set used in said electron source document; inputting a target standardization font set; inputting a comparison table made in a previous conversion; inputting font object information to describe a rule set to limit objects of character comparison and a rule set related to mapping for each kanji radical ; and outputting a comparison table candidate list. However, Hube, in claim 6 in col. 10, lines 14-34, describes a method for controlling font substitution in an electronic document. It was notoriously well known in the art at

the time of the invention that inputting an electronic source document is a necessary and customary step prior to its being processed. Furthermore, Hube describes storing a number of fonts in a font library, and it would have been obvious to one of ordinary skill in the art at the time of the invention to have this involve inputting a font set used in said electronic source document because this would give the user control over the fonts used. Hube also describes the use of a mapping, which constitutes a form of inputting a target standardization font set and inputting a comparison table made in a previous conversion. It was notoriously well known in the art at the time of the invention that a program may output internal data in order to clarify how it operates to the user, and hence it would have been obvious to one of ordinary skill in the art to include the step of outputting a font comparison table candidate list in order to clarify how it operates to the user. Hube fails to disclose inputting font object information to describe a rule set to limit objects of character comparison and a rule set related to mapping for each kanji radical. However, Patel discloses in col. 4, lines 52-58 the use of glyphName to glyphID mappings, and in col. 30, lines 43-49, that kanji is a language to which such mapping may apply. The motivation for such mappings is to define changes to a font. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Patel's teachings about rules for kanji radicals into Hube's invention in order to define changes to a font.

7. **Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft Corporation, further in view of Hube, further in view of Patel, further in view of**

“Item-Mapping Subsystem”, IBM Technical Disclosure Bulletin, June 1993 (pages 553-556, pub. Date 6/1/1993), hereinafter IBMTDB

8. **Regarding dependent claim 3**, Microsoft Corporation, Hube and Patel fail to disclose a step of outputting weighting information regarding mapping between similar character codes as a reference file. IBMTDB discloses that in performing a mapping, a variable weighting scheme may be used to avoid collisions in a hashing schemes typically used in mapping. It was notoriously well known in the art at the time of the invention that a program may output internal data in order to clarify how it operates to the user. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of weighting of IBMTDB into Hube and Patel in order to avoid collisions in hashing schemes used in mappings. The result would be a step of outputting weighting information regarding mapping between similar characters as a reference file.
9. **Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft Corporation, further in view of Hube, further in view of Patel, further in view of Ng et al. (USPN 6,360,223 B1—filing date 6/29/1998), hereinafter Ng**
10. **Regarding dependent claim 4**, Microsoft Corporation, Hube and Patel fail to disclose a method wherein said comparison table candidate list takes as elements groups of comprising one character code within a source font and a plurality of character codes within a target font compatible with said source font. However, Ng discloses in col. 7, lines 14-31, the use of many-to-many relationships in mappings to accurately model situations where such a mapping is appropriate. Hence, it would have been obvious to one of ordinary skill in the art to follow Ng’s teachings about many-to-many

relationships in the context of Hube and Patel to have said font comparison table list take as elements groups comprising one character within a source font and a plurality of characters within a target font compatible with said source font accurately model the situation (which involves a many-to-many mapping).

11. **Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft Corporation, further in view of Hube, further in view of Patel, further in view of Ng further in view of Melen et al. (USPN 5,257,323—filing date 5/29/1991), hereinafter Melen**
12. **Regarding dependent claim 5**, Microsoft Corporation, Hube, Patel, and Ng fail to disclose a method further comprising adding priority level information for said plurality of character codes within said target font. However, Melen discloses in col. 1, lines 27-60 an invention that attaches confidence factors to a group of inputs to aid selection amongst them. Because confidence is analogous to priority level information, it would have been obvious to one of ordinary skill in the art at the time of the invention to follow Melen's teaching's to add priority level information for said plurality of character codes within said target font to aid selection among them.
13. **Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft Corporation, further in view of Hube, further in view of Ng**
14. **Regarding dependent claim 6**, Microsoft Corporation and Hube fail to disclose a method wherein the comparison table is a list taking as elements a corresponding relationship between a group of a source font set and character code within this source and a group of a target font set and character code within this target font set. However, as Ng

discloses in col. 7, lines 14-31, the use of many-to-many relationships in mappings to accurately model situations where such a mapping is appropriate. Hence, it would have been obvious to one of ordinary skill in the art to follow Ng's teachings about many-to-many relationships in the context of Hube to have a method wherein the comparison table is a list taking as elements a corresponding relation ship between a group of a source font set and character code within this source and a group of a target font set and character code within this target font set in order to accurately model the situation (which involves a many-to-many mapping).

15. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft Corporation, further in view of Hube, further in view of Agazzi et al. (USPN 6,389,178 B1—filing date 7/28/1994), hereinafter Agazzi

16. Regarding dependent claim 7, Microsoft Corporation and Hube fail to disclose a method wherein said step of comparing is carried out automatically using Optical Character Recognition (OCR) technology. However, Agazzi, in col. 3, lines 46-50, discloses a method of font substitution that is carried out by OCR in order to allow downsampling of a document. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Hube's teachings with the OCR teachings of Agazzi to facilitate downsampling of a document, thereby resulting in a method wherein said step of comparing is carried out automatically using Optical Character Recognition (OCR) technology.

- 17. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft Corporation, further in view of Hube et al. (USPN 5,167,013—filing date 9/28/1990), hereinafter Hube**
- 18. Regarding dependent claim 9,** Microsoft Corporation fails to disclose a method of standardizing character information in electronic documents of claim 1, wherein a comparison table and a rule set describing a structure of a source electronic document are input and standardization of fonts and character code used in said source electronic document are carried out in said step of replacing said character information. However, Hube, in col. 10, lines 31-32 refers to a programmable look up table mapping unknown fonts to known fonts. It was notoriously well known in the art at the time of the invention that one may use stylesheets to describe the structure of a source electronic document in order to aid in managing its formatting. Given these teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a method wherein a comparison table and a rule set describing a structure of a source electronic document are input and standardization of fonts and character code used in said source electronic document are carried out in said step of replacing said character information, because Hube's invention involves all of these features except for the rule set describing a structure of a source electronic document and such a rule set would be characteristic of a stylesheet, which would aid in managing the formatting of the document.

Response to Amendment

Art Unit: 2178

19. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USPN 6,038,575 (filing date 09/11/1996)—Jensen et al.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

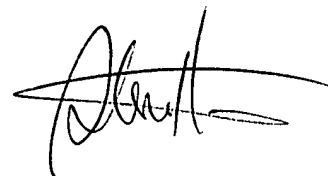
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan D. Schlaifer whose telephone number is 703-305-9777. The examiner can normally be reached on 8:30-5:00, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 703-308-5186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2178

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JS

A handwritten signature in black ink, appearing to read 'S. Hong', with a long horizontal stroke extending to the right.

**STEPHEN S. HONG
PRIMARY EXAMINER**